

CLAIM AMENDMENTS

Amend claims: 1-11 and add new claims 12-16.

- 5 1. (Currently Amended) A process for combusting coke of a coke-containing FCC catalyst in a regeneration unit of a FCC unit comprising the introduction of oxygen-containing gas through a gas transport unit (7) into the regeneration unit (2) and combusting the coke means of an oxygen-containing gas, ~~wherein characterized in that~~ the oxygen-containing gas is cooled in a cooling unit (8) to a temperature below the dew
- 10 point of water present in the gas thereby giving condensation of water, wherein the condensed water is separated from the gas before it is brought in contact with the coke-containing FCC catalyst.
- 15 2. (Currently Amended) The process ~~according to~~ of claim 1, wherein the oxygen-containing gas is cooled before or during its stay in the gas transport unit.
3. (Currently Amended) The process ~~according to~~ of claim 2 wherein the oxygen-containing gas is cooled before its stay in the gas transport unit.
- 20 4. (Currently Amended) The process ~~according to any one of claims 1-3~~ wherein the oxygen-containing gas is air.
- 25 5. (Currently Amended) The process ~~according to~~ of claim 4, wherein the air has a temperature higher than 25°C, ~~preferably higher than 30°C~~.
6. (Currently Amended) The process ~~according to any one of claims 4-5~~, wherein the air has a water content before cooling of between 50 and 100% of total saturation, ~~preferably between 75 and 100% of total saturation~~.
- 30 7. (Currently Amended) The process ~~according to any one of claims 4-6~~, wherein the air is cooled with a temperature differential from 35 to 10°C.
8. (Currently Amended) The process ~~according to any one of claims 1-7~~ wherein the gas transport unit (7) is an air blower.

9. (Currently Amended) The process ~~according to any one of claims 1-8~~ wherein cooling is performed in an industrial chiller (8).

10. (Currently Amended) A method for decreasing the thermal deactivation of a catalyst in an FCC regeneration process, ~~characterized in that~~ wherein the regeneration process is performed by applying the process according to any one of claims 1-9 for combusting coke of a coke-containing FCC catalyst in a regeneration unit of a FCC unit comprising the introduction of oxygen-containing gas through a gas transport unit into the regeneration unit and combusting the coke means of an oxygen-containing gas, wherein the oxygen-containing gas is cooled in a cooling unit to a temperature below the dew point of water present in the gas thereby giving condensation of water, wherein the condensed water is separated from the gas before it is brought in contact with the coke-containing FCC catalyst.

11. (Currently Amended) A regenerator apparatus for performing the process ~~according to~~ of claims 1-9, comprising inlet and outlet means (~~3, 4, 5, 14~~), and an inlet (~~6~~), wherein the apparatus further comprises a gas transport unit (~~7~~) located in or at inlet means (~~6~~) of the regenerator unit (~~2~~), and a cooling unit (8) in the transport unit or upstream the transport unit at its suction side.

12. (New) A process for regenerating an FCC catalyst containing coke, said process comprises:
cooling an oxygen-containing gas, having a water content and a non-cooled temperature, to a temperature below the dew point temperature of said oxygen-containing gas to thereby provide a cooled gas containing condensed water;
separating said condensed water from said cooled gas to provide a separated cooled gas;
and,
introducing said separated cooled gas into an FCC regenerator, wherein said separated cooled gas is contacted with said FCC catalyst under coke combustion conditions.

13. (New) A process as recited in claim 12, wherein said oxygen-containing gas comprises air.

14. (New) A process as recited in claim 13, wherein said oxygen-containing gas has a temperature higher than 25 °C.

15. (New) A process as recited in claim 14, wherein said water content of said
5 oxygen-containing gas is in the range of from 50 to 100 % of total saturation.

16. (New) A process as recited in claim 15, wherein said temperature is from 10 °C to 35 °C below said non-cooled temperature.